APPENDIX B

SMOKE, FLAME, HERBICIDES, AND RIOT CONTROL AGENTS

This appendix provides guidance on the employment of chemical agents and munitions in COIN operations.

B-1. SMOKE

Smoke can be employed to identify, signal, obscure, deceive, and screen. It helps identify and signal targets, supply and evacuation points, and friendly unit positions. Smoke also provides the COIN commander with prearranged battlefield communications.

a. Obscuration aids in deceiving the enemy, concealing maneuver, and increasing the potential force-on-force ratio when the target cannot see through the smoke. Smoke supports LIC operations by creating a feeling of isolation that reduces the insurgent's will to resist. In counterterrorist activities, smoke restricts the use of airfields or facilities, and conceals the movements of counterterrorist forces. It also restricts the effectiveness of sophisticated sighting systems used by state sponsored terrorists.

(1) The use of obscurants in counterterrorist or counterinsurgency operations requires the same planning as in mid- to high-intensity conflicts. If properly planned, obscurants increase survivability by concealing friendly forces from enemy observation and from intelligence-gathering operations without degrading operational capabilities.

(2) In peacetime contingency operations, units use smoke to protect forces in a show-of-force or demonstration exercise. During an actual extraction or raid, they use obscurants to conceal LZs and entrances into buildings, and to confuse the enemy as to the size and strength of the force. The use of obscurants can reduce the effect of all command and control measures while enhancing mission success. During the exfiltration, smoke can cover routes and can allow the extraction force to break contact and escape. Deception smoke operations must be planned and conducted to divert the attention of the enemy away from the intended operation.

b. Smoke sources include the following:

(1) Mechanical smoke generators (large screen areas).

(2) Smoke grenades (small screens, signaling, identifying).

(3) M1 smoke pot, 10-pound (small screen).

(4) ABC-M5 smoke pot, 30-pound (small screen).

(5) M4A2 floating smoke pot (small screens, ground or water base).

(6) WP mortar, and WP and HC artillery rounds (obscuring, signaling, deceiving, identifying, screening).

(7) WP tank rounds, 90-mm and 105-mm (small screens, obscuring, signaling, identifying).

(8) Grenade-launched round by tanks, BFV, and M203 grenade launcher (small, individual screens).

(9) Vehicle engine exhaust smoke systems, tanks, and BFV (small, individual screens).

(10) Aircraft-delivered smoke ordnance (large screens).

c. Depending on the weather and terrain, smoke screening may not always be effective. For example, the wind could be too strong or be blowing from the wrong direction. Signaling, identifying, and obscuring are all good smoke missions in all phases of a COIN operation.

B-2. FLAME EXPEDIENTS AND THE M202 ROCKET LAUNCHER

Flaming fuel and hot shrapnel, exploding over an area up to 100 meters in diameter, are effective defensive weapons. If a target is to be pinpointed,

then the M202 rocket can be used to flame a hostile position.

a. The flame mine is an omnidirectional expedient that can be command-detonated or activated by a trip wire. It scatters flame and shrapnel over an area 20 to 100 meters in diameter, depending on the size of the mine.

b. The fougasse (flame/shrapnel) expedient is similar to the mine except that its explosive force is directional (rather than all-round). A 55-gallon barrel is often used as a container for fuel and shrapnel. The barrel is placed in a V-trench and sandbagged in place, and an explosive charge is placed behind the barrel. When exploded, the flaming fuel and pieces of metal are blown out to a distance of 200 meters or more (in a broad V-pattern).

c. The M202 rocket launcher contains four rockets that burst into flame on impact. The aiming device on the launcher provides on-target accuracy for close combat.

B-3. HERBICIDES

The US renounces first use of herbicides in war except when used for control of vegetation within US bases and installations. Herbicides can also be used around the immediate defensive perimeters to clear observation and fields of fire. They have the potential to destroy food production and to defoliate large areas. However, the US will not use herbicides in this way, unless they are first used against US forces and the President directs their use in retaliation.

B-4. RIOT-CONTROL AGENTS

The US renounces the first use of RCAs in war except defensively to save lives. RCA use is not governed by the same policy as chemical agents. Since RCAs are not used to injure or kill and their effects are short lived, situations arise when RCA use is more appropriate than conventional weapons. (See FM 3-100.)

a. RCA containers include hand grenades and 40-mm CS cartridge grenades (M203 grenade launcher). When used, the grenades, whether thrown or fired, are directed upwind of the target so the chemical vapor drifts onto the hostile position.

b. Commonly used RCAs contain chemicals that cause lung irritation and watering of the eyes. They are used to force insurgents from tunnels, caves, and buildings in an effort to take them prisoner. When COIN units probe possible ambush sites, RCAs can be used to flush insurgents and take prisoners.

c. When COIN units are in defensive positions, canisters of RCA (containing the agent in powder form) can be detonated by remote control.

d. COIN personnel wear the protective mask and cover exposed skin areas when employing RCAs. Decontamination, after RCA missions, requires troops to wash skin areas and brush or wash clothing.